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### ABSTRACT

The pedagogical imperative to prepare students to become critical thinkers, critical readers, and critical writers for the coming millennium necessitates a comprehensive college discourse on critical thinking. The paper cites seminars and workshops that incorporate theoretical and practical dimensions of teaching critical-analytical thinking processes. Using descriptions from the text, "Logic and Contemporary Rhetoric" (Howard Kahane), the paper outlines nine 75-minute seminars and workshops that offer examples and exercises drawn from a broad range of sources, including advertisements, political speeches, newspapers, audio-visuals, and sample examinations. Course objectives include developing a critical understanding of the following: (1) "Bloom's taxonomy"; (2) "the difference between fact and opinion"; (3) "the fundamental elements of analysis"; (4) "Aristotelian proofs: ethos, logos, and pathos"; (5) "divergent thinking (multiple perspectives)"; (6) "types of arguments and fallacies"; (7) "how culture affects thought processes"; (8) "how to decipher examinations"; and (9) "how to integrate technology driven data into the research process." Successful completion of the seminars/workshops means that each student completes satisfactorily 80% of the materials covered in each of the nine sessions. Pedagogical strategies are attached. Contains a 12-item selected bibliography. (BT)

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Critical Thinking for the New Millenium: A Pedagogical Imperative.

by Andrew Ann Dinkins Lee

# SO 030 663

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### CRITICAL THINKING FOR THE NEW MILLENIUM: A PEDAGOGICAL IMPERATIVE

Mastery demands that students go far beyond rote memorization.

A student who has achieved academic mastery can graft theory into practice- integrate subject matter with real-world experiences.

Mastery empowers a student to deal constructively with the world outside the classroom door.

Mary Hatwood Futrell, (Critical Thinking Skills 5)

### SEMINARS/WORKSHOPS BACKGROUND:

In order to succeed in today's expanding, global (and technological) society, students will need to master the pinnacle of what Mary Futrell called a "higher order of thinking." They will need to be able to distinguish facts from inferences; assess the credibility of propositions; and judge the soundness of evidence. Richard Paul argues that the logic of organized thinking must be an integral part of the college curricula (*Critical Thinking* 88). The pedagogical imperative to prepare students to become critical thinkers, critical readers, and critical writers for the coming millenium necessitates a comprehensive college/university discourse on critical thinking.

The seminars/workshops outlined below incorporate theoretical and practical dimensions of teaching critical-analytical thinking processes. Using descriptions from the text *Logic and Contemporary Rhetoric*, the seminars/workshops provide "examples and exercise items drawn from a broad range of sources: advertisements, political speeches, newspapers, audio-visuals, sample examinations, and so on. Thus, through the thorough



examination of data, indicative of contemporary life," students learn to master a higher order of thinking.

The seminars/workshops constitute NINE (seventy-five minute\*) thought provoking sessions. The first and final sessions\* should meet for one hour and thirty minutes to allow for a brief orientation and a wrap-up, respectively. Course objectives include developing a critical understanding of the following:

- 1) Bloom's taxonomy;
- 2) the difference between fact and opinion;
- 3) the fundamental elements of analysis;
- 4) Aristotelian proofs: ethos (personal proofs), logos (logical proofs), and pathos (emotional proofs);
- 5) divergent thinking (multiple perspectives);
- 6) types of arguments and fallacies;
- 7) how culture affects thought processes:
- 8) how to decipher examinations:
- 9) how to integrate technology driven data into the research process.

The ultimate goal of the seminars/workshops is to empower students to become efficient thinkers, readers, and writers in the competitive, international milieu called the new millenium.

### ASSESSMENT

Richard Mayer and Fiona Goodchild assert that "learning to become a critical thinker involves three levels of change: an affective change, a cognitive change, and a behavioral change" (4). Students must learn to value becoming critical thinkers; they must learn the strategies needed to master critical thinking, and they must apply acquired



knowledge of critical thinking to the critical dimensions of their respective disciplines. The processes of evaluation include the use of the following assessment tools:

- a) Oral tests
- b) Written tests
- c) Performance tests
- d) Online tests

Successful completion of the seminars/workshops means that each student completes satisfactorily eighty percent (80%) of the materials covered in each of the nine sessions. In sum, at the completion of the workshops, students should be able demonstrate the ability to access a higher order of thinking.



# CRITICAL THINKING SEMINARS/WORKSHOPS PEDAGOGICAL STRATEGIES

### SESSION I: BASICS IN "BLOOM"

- 1. Defining the six levels of Bloom's Taxonomy
- 2. Employing a higher order of thinking skills
- 3. Assessing the merits of Bloom's Taxonomy

### SESSION II: FACTS OR INFERENCES?

- 1. Distinguishing between facts and inferences
- 2. Analyzing discursive and non-discursive artifacts

### SESSION III: THE A B Cs OF ANALYSIS

- 1. Understanding the rhetorical process of analysis
- 2. Improving analytical skills (procedural discrimination)

### SESSION IV: CATEGORIZING ARISTOTELIAN PROOFS

- 1. Utilizing ethos (personal proofs)
- 2. Utilizing pathos (emotional proofs)
- 3. Utilizing logos (logical proofs)
- 4. Combining the three to create a "good reason" to speak

### SESSION V: DEVELOPING THINKING SKILLS THROUGH

### DIVERGENT THINKING

- 1. Understanding and appreciating multiple perspectives
- 2. Making better decisions
- 3. Fostering creative thinking



### SESSION VI: UNDERSTANDING REASONED AND FALLACIOUS ARGUMENTS

- 1. Developing inductive arguments
- 2. Developing deductive arguments
- 3. Detecting fallacious arguments
- Developing critical thinking, critical reading, and critical writing skills

### SESSION VII: CRITICAL THINKING: AN INTERCULTURAL PERSPECTIVE

- 1. Assessing cultural differences
- 2. Internationalizing the curriculum

### SESSION VIII: MASTERING TEST-TAKING SKILLS

- 1. Understanding Test Instructions
- 2. Analyzing Test Data/Employing Test-Taking Skills

### SESSION IX: CRITICAL THINKING WITH TECHNOLOGY

- 1. Developing the research paper using the Internet
- 2. Problem-solving online



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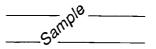


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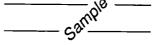
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